



State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

2200 Churchill Road, Springfield, Illinois 62794-9276

Mary A. Gade, Director

217/782-5544

May 27, 1997

Raymond T. Reott
Jenner & Block
One IBM Plaza
Chicago, Illinois 60611

Re: R. Lavin & Sons, Inc.

Dear Ray:

At your request, I am providing the following comments regarding the initial draft of R. Lavin & Sons' ("Lavin") Storm Water Pollution Prevention Plan ("SWPPP") that you had provided to Assistant Attorney General Christine Bucko in February of this year. As you know, the National Pollutant Discharge Elimination System ("NPDES") permit issued to Lavin on April 4, 1997 requires the formal submission of a SWPPP within 90 days of the effective date of the permit. In order to assist Lavin with preparation of that submittal, you had sought feedback regarding the February 1997 draft. The Illinois Environmental Protection Agency reserves the right to provide any further comments it deems appropriate in the review and approval process for the SWPPP required under Special Condition 11 of NPDES Permit No. IL0002755.

- 1). It should first be noted that the February 1997 draft of the SWPPP is somewhat deficient in providing the details necessary to assure the benefits expected from such a plan. Some of the more significant instances in which needed details are lacking are described below.
- 2). The completed SWPPP will need to supply the topographic map and site map described in the permit, along with all other appendix items not provided in the draft document.
- 3). The SWPPP does not go far enough in defining inspection and preventative maintenance procedures to insure that the equipment and plant areas are being maintained adequately. Specifically, the leak of process water into the storm water system that occurred in February of 1996 over an eighteen day period points to a probable deficiency in preventative maintenance and inspection procedures. The SWPPP, as drafted, does not address these issues other than to say that piping and pumps will be checked. These procedures should be tied in with the employee training program. As stated in item F(7) of Special Condition 11, the employee training program shall inform responsible personnel of the components and goals of the program. A brief description of such components and goals should be stated in the SWPPP, rather than a mere restatement of what is in the special condition.
- 4). The SWPPP incorporates the Spill Prevention Control and Countermeasures ("SPCC") plan by reference and it appears that some parts of the SPCC plan are utilized at various points in the

US EPA RECORDS CENTER REGION 5



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Page 2

SWPPP. However, item H of Special Condition 11 requires that a brief description of the appropriate elements of other pertinent environmental plans be included in the SWPPP itself. These descriptions should be placed in section 1(B) of the SWPPP.

- 5). The site specific best management practices ("BMP's) described in the SWPPP appear adequate except for concerns regarding the storage of materials and system redundancy. The SWPPP lists limestone as stored outside on asphalt paving. Limestone runoff may cause elevated pH values in the storm water at outfall 002 (which had been previously found). This situation should be discussed in the BMP section of the plan. Also, the BMP's listed on page 16 of the SWPPP do not mention any plans for minimizing the rain water exposure of any excess slag that sits next to the covered slag bin. The systems redundancy discussion concerns the ability of the facility to keep the recirculation ditches pumped as low as possible during equipment failure. This concern should also be addressed in the preventative maintenance and BMP sections of the SWPPP.

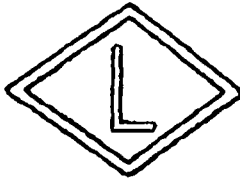
Should you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Bruce L. Carlson
Deputy Counsel
Division of Legal Counsel

R. Lavin & Sons, Inc.

Refiners and Smelters of Nonferrous Metals



2028 SHERIDAN ROAD* NORTH CHICAGO, ILLINOIS 60064* 847/689-4300

TELECOMMUNICATIONS TRANSMITTAL

DATE 2/17/97

TIME 3⁰⁰ PM

TO ILLINOIS ATTORNEY GENERAL
1-312-814-3806

ATTN CHRIS BUCKO / HOWARD CHINN

FROM GEORGE LENNON

MESSAGE:

The following is a First draft of our Stormwater Pollution Prevention Plan. We are still working on the development of this plan and thus anticipate some changes in the future.

Copy Sent to Howard.

TOTAL NUMBER OF PAGES INCLUDING THIS COVER SHEET 32

PLEASE CALL IMMEDIATELY IF THIS IS NOT A COMPLETE TRANSMISSION.

PHONE: (847) 689-4300

FAX: (847) 689-0513



R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

TABLE OF CONTENTS

| | |
|--|------|
| Purpose | 1 |
| Emergency Contacts | 1 |
| Background | 3 |
| I. Planning and Organization | 3 |
| A. Pollution Prevention Team | 3-4 |
| B. Relationship to Other Environmental Plans | 4 |
| II. Site Assessment | 5 |
| A. Maps | 5 |
| B. Material Inventory | 5-6 |
| C. Past Spills and Leaks | 7 |
| D. Risk Identification and Summary of Potential Pollutant Sources | 8 |
| III. Existing Structural and Non-Structural Control Measures .. | 9 |
| A. Good Housekeeping | 9 |
| B. Preventative Maintenance | 9-10 |
| C. Visual Inspections | 11 |
| D. Spill Prevention and Response | 11 |
| E. Sediment and Erosion Control | 11 |
| F. Management of Runoff | 12 |
| G. Other BMP's | 12 |

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

| | |
|--|----|
| IV. Activity - Specific Source Control BMP's | 13 |
| A. Fueling Activities | 13 |
| B. Vehicle and Equipment Maintenance | 14 |
| C. Loading and Unloading Materials | 15 |
| D. Outside Storage of Material | 16 |
| E. Air Pollution Control | 17 |
| F. Process Water Recirculating System | 18 |
| V. Pollutants of Concern | 19 |
| VI. Employee Training | 19 |
| VII. Size of Facility | 19 |
| VIII. Plan Evaluation | 20 |
| A. Comprehensive Site Compliance Evaluation | 20 |
| B. Recordkeeping and Internal Reporting | 21 |
| C. Plan Revisions | 21 |
| IX. Sampling Data | 21 |
| X. Person Responsible for Preparation of Plan | 21 |
| XI. Appendices | |
| A. Site Map | |
| B. Sampling Data | |
| C. Inspection and Maintenance Forms | |
| D. Process Water System Schematic | |
| E. Air Pollution Control Devices & Associated Emission Units | |
| F. Forms File Names | |

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

Purpose: To identify the potential sources of pollution which may affect the quality of storm water discharges associated with industrial activity at the facility. In addition, this plan will describe and insure the implementation of management practices to be used to reduce pollutants in storm water discharges and to assure compliance with the terms and conditions of Lavin's NPDES permit.

Emergency Contacts:

| | | |
|---------------------------|--------------------|-----------------------|
| 1. Arnold Kerstein | Work Phone #: | 847-689-4300 Ext. 144 |
| Plant Manager | Emergency Phone #: | Same as above |
| 2. George Lennon | Work Phone # | 847-689-4300 Ext. 115 |
| Assistant Plant Manager | Emergency Phone #: | Same as above |
| 3. Dennis Caldwell | Work Phone # | 847-689-4300 Ext. 155 |
| Environmental Coordinator | Emergency Phone #: | Same as above |
| 4. Dan Wiora | Work Phone # | 847-689-4300 Ext 165 |
| Maintenance Supervisor | Emergency Phone # | Same as above |

Emergency: Security department which conducts 24 hour surveillance of the facility will contact appropriate personnel when necessary.

| | |
|-----------------------|--|
| Type of Manufacturer: | Secondary non-ferrous metals smelting and refining |
| SIC Code: | 3341 |
| Number of Employees | 160 |
| NPDES Permit Number | IL0002755 |

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

Background

Facility Description: - R. Lavin & Sons, Inc. is located at 2028 Sheridan Road in an industrial section of North Chicago, Illinois. The facility is situated in the north-western corner of Section 4, T44n, R12E (see attached topographic map). The site occupies a 17.5 acre parcel bounded by the Elgin, Joliet, and Eastern railroad on the north, Sheridan Road on the east, 22nd street on the south and Fansteel, Inc. property on the west.

R. Lavin operates a facility classified as secondary smelting and refining of nonferrous metals and alloys (SIC Code 3341). The facility is adjacent to Sheridan Road and has several stormwater effluent discharges into the Sheridan Road storm sewer owned by the City of North Chicago. That storm sewer begins just north of Lavin's facility and continues south, with connections by other sources, to drain into the northern tributary to Pettibone Creek.

Lavin has discharges permitted under the National Pollutant Discharge Elimination System ("NPDES"). The permit (IL0002755) was issued in 1991 and is currently under appeal at the Pollution Control Board ("PCB"). All discharges enter the storm sewer on Sheridan Road.

There are other dischargers (EMCO and Fansteel) into the Pettibone Creek tributary upstream of the Sheridan Road storm sewer discharge. From the junction with the Sheridan Road storm sewer, the northern tributary of Pettibone Creek continues meandering southeasterly for about 150 feet before entering a closed culvert or tunnel. The stream continues in the channelized underground pipes under the Great Lakes Naval Training Center, exiting in the Great Lakes Naval Training Harbor which exits into Lake Michigan.

Pettibone Creek drains about 20.9 square miles. Very low flows are typical in dry weather, but flooding is common during heavy rainfall. Past studies have not shown any water quality violations in Pettibone Creek or its tributaries downstream of Lavin's discharge.

Industrial Activities: - R. Lavin & Sons operates a non-ferrous secondary copper and brass recycling operation at this site. Scrap copper and scrap brass in many forms are purchased nationwide, smelted and refined in metallurgical furnaces and then poured into brass and bronze ingots of known certifiable compositions. The various alloys produced are then shipped to customers to produce castings of brass and bronze.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

I. PLANNING AND ORGANIZATION

A. Pollution Prevention Team

A pollution prevention team has been formed to develop and implement this plan. Storm water pollution prevention practices have been implemented at this site over the past decade. These will be reevaluated by this team and incorporated into the plan. The responsibilities of the team will include a current site assessment, and evaluation of pollutant sources and risks, decision making on appropriate Best Management Practices (BMPs), direction of the actual implementation of the BMP's and regular evaluation of the effectiveness of the Plan.

The team will be comprised of the following members:

Leader: George Lennon

Title: Assistant Plant Manager

Office Phone: (847) 689- 4300 Ext 115

Responsibilities: Signatory authority; coordinate all stages of plan development and implementation; spill response coordinator; note any process changes.

Members:

(1) Dennis Caldwell

Title: Environmental Coordinator

Office Phone (847) 689 - 4300 Ext: 155

Responsibilities: Write the plan, keep all records and ensure that reports are submitted, help conduct inspections and assist in employee training.

(2) James Bredahl

Title: Personnel/Safety Director

Office Phone (847) 689- 4300 Ext: 148

Responsibilities: Coordinate employee training program

(3) Dan Wiora

Title: Maintenance Department Supervisor

Office Phone (847) 689 - 4300 Ext: 165

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

Responsibilities: Oversee "good housekeeping" and preventative maintenance programs

(4) Ken Weiss

Title: Purchasing Manager
Office Phone (847) 689 - 4300 Ext: 142

Responsibilities:

Assist with inspections, purchase pollution prevention materials and equipment, arrange for recycling of degreasers, used oils and solvents.

Team Activities

Responsibilities: Develop the plan elements; select storm water management options, conduct inspections.

B. Relationship to Other Environmental Plans

The Storm Water Pollution Plan overlaps with some of the requirements addressed in other environmental plans. Sections of the following plans pertaining to spill prevention and management and emergency procedures are incorporated by reference into this plan:

- (1) Preparedness, Prevention, and Contingency Plan (40 CFR 264 and 265)
- (2) Spill Prevention and Control and Countermeasure (SPCC) Plan (Section 311 of CWA)

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

II. SITE ASSESSMENT

A. Maps

A topographic map extending beyond the property boundaries of the facility and a comprehensive site map are included in this Plan (Appendix A).

B. Material Inventory

The following materials or substances are stored, processed, used and/or produced at this facility and may be exposed to storm water.

| <u>Materials</u> | <u>Method and location of onsite storage</u> |
|--------------------------------|--|
| - Brass and bronze scrap metal | Stored inside in an enclosed warehouse; When scrap metal inventory is very high, some scrap metal stored outside on asphalt or concrete. |
| - Brass and bronze ingot | Stored inside on pallets in an enclosed warehouse prior to shipping; stored outside in tote boxes for cooling purposes for several hours just after pouring. |
| - Coke | Stored outside in a bin adjacent to Cupola furnace building. |
| - Glass (cullett) | Stored in an outside storage bin. |
| - Mill Scale | Stored inside in storage bin or occasionally in an outside storage bin. |
| - Silica sand | Stored in a covered outside storage bin. |

R. Layin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

B. Material Inventory (Cont.)

| <u>Materials</u> | <u>Method and location of onsite storage</u> |
|----------------------------------|--|
| - Limestone | Stored outside on asphalt paving next to south warehouse and glass storage bin. |
| - Furnace Slag | Stored outside on concrete paving in covered storage bins adjacent to cupola furnace building. Occasionally when the slag inventory is high this material may be placed on concrete outside of the bins. |
| - Refractory brick | Stored inside in a large warehouse; however, may briefly contact storm water during transportation via fork lifts from warehouse to furnace rooms. |
| - Regular unleaded gasoline | Stored in above ground tank with secondary containment. |
| - Diesel fuel oil | Stored in above ground tank with secondary containment. |
| - Mineral spirits | Stored in above ground tank. |
| - Hydraulic and lubricating oils | Stored in drums. |

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

C. Past Spills and Leaks

There have been no significant spills or leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at this facility within the past three years. However, in November of 1996, a leak occurred in the process water system that allowed the infiltration of some process water into the plant's storm sewer system. The leak occurred at a manhole that was serving as a sump for the return flow of cooling water from the cupola furnace operation. The necessary repairs have been made to this manhole to prevent any further leakage.

It is estimated that this leak occurred over an 18 day period at an average rate of 5 gpm. This would imply that approximately 130,000 gallons of process water infiltrated our storm sewer system during this time. Some of this process water was pumped from the east ditch to the 2 million gallon storage tank.

R. Layin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

D. Risk Identification and Summary of Potential Pollutant Sources

(1) Loading and Unloading Operations

Most of the material loading and unloading operations at the facility are conducted inside buildings or under building overhangs at loading docks. However, there are several materials, some of which contain heavy metals, with the potential to come into contact with storm water during loading for off-site shipment or for in-plant use.

- a. Zinc oxide powder
- b. Cupola flue dust
- c. Spent refractory brick
- d. Silica sand
- e. Mill scale
- f. Glass

(2) Outdoor Storage Activities

The following materials are stored in outside storage bins with open fronts and could come in contact with storm water.

- a. Furnace slag
- b. Silica sand
- c. Glass
- d. Mill scale

(3) Particulate Generating Activities

Air emissions, not captured by baghouses, consisting primarily of metal-bearing suspended particulate matter are generated at the facility. Some of this fine material deposits on the ground and on building roofs at the site. Dust is generated from the crushing of furnace slag prior to its reclamation in a cupola blast furnace.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

III. Existing Structural and Non-Structural Control Measures

The following practices to eliminate or reduce pollutant loadings in storm water discharges from this facility are and will be regularly implemented as part of this Plan:

A. Good Housekeeping

1. Regularly scheduled sweeping (weather permitting) of paved areas throughout the facility (see attached Schedule).
2. Vacuuming of manholes and sumps as needed throughout the plant.
3. Ensure that spill cleanup procedures per the SPCC and the Contingency Plans are implemented when needed.
4. Vacuum flues and critical areas on roofs near flue cleanouts.
5. Minimize storage of scrap outside to avoid contact with storm water.
6. Routinely inspect for leaks or conditions that could lead to contact of storm water with raw materials, waste materials, and products.
7. Store containers and drums away from direct traffic routes to prevent accidental spillage.
8. Identify all chemical substances present in the workplace.

B. Preventative Maintenance

1. Identify which systems and equipment could malfunction and cause spills, leaks or other situations that could lead to storm water runoff contamination.
2. Set schedules for routine equipment inspections which include examination for leaks, corrosion, and support or foundation failure.
3. Daily and weekly checks and maintenance of air pollution control equipment to ensure equipment is in proper working condition (see Appendix C).

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

B. Preventative Maintenance (cont.)

4. Annual summer shutdown (two to three weeks) of plant for repair and maintenance of production and air/water pollution control equipment.
5. Annual winter shutdown (one to two weeks) of plant for repair and maintenance of production and air/water pollution control equipment.
6. Promptly repair or replace defective equipment found during inspections and testings.
7. Regularly check piping, pumps, storage tanks and bins, process and material handling equipment, and material bulk storage areas for leaks, wind dispersion, corrosion, support or foundation failure, or other deterioration or noncontainment.
8. Process water system (see schematic in Appendix D).
 - a. Daily routine inspection of key elements of process water system to ensure proper working conditions.
 - b. Extensive alarm system to plant security office for key elements of process water system. Levels set to enable maintenance to be conducted prior to any release of water.
 - c. Built in redundancy in system equipment and controls.
 - d. Annual inspection by pump manufacturer of all pumps in pumping station.
 - e. Prompt repairs of defective equipment found during inspections.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

C. Visual Inspections

1. Qualified personnel, including members of management, regularly visually inspect plant equipment and above-ground tanks and areas where materials are handled, stored or transferred.
2. The facility has a 24 hour, 7 day security surveillance program in place with trained security personnel.
3. Inspect paving at the site monthly and annually for cracks and other signs of deterioration
4. Loading and unloading areas checked daily for spillage.

D. Spill Prevention and Response

R. Lavin & Sons has developed and implemented a Spill Prevention Control and Countermeasure (SPCC) Plan and a Contingency Plan incorporated herein that identifies areas where spills could occur onsite and that outlines procedures to be used for cleaning up spills.

E. Sediment and Erosion Control

1. Almost entire site paved with asphalt or concrete (see site map - appendix A).
2. Installed a weir at Outfall 002 in the east ditch to restrict downstream movement of sediment.
3. Engineered and installed drainage facilities including gutters, storm sewers, and grate inlets in newly paved areas to reduce surface storm water runoff and prevent ponding.
4. Placed stones along the banks of the east and west ditches to control erosion and sedimentation.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

F. Management of Runoff

Storm water runoff is captured and detained in a detention system (see site map - Appendix A for current location) which will be maintained to have a storage capacity of at least 125,000 gallons. While the runoff is stored in this system, settling of suspended solids occurs reducing the concentration of pollutants in the water. This water is then pumped to a two million gallon storage tank from where it is pumped and used as "makeup" in the facility's process water recirculating system.

G. Other BMP's

1. Sewer traps installed in storm water manholes to capture suspended solids in runoff. Material captured in sewer traps is periodically vacuumed and then reclaimed for metals in metallurgical furnaces.
2. Flue trail cleanout receiving areas enclosed to inhibit wind dispersal of fine particulate matter.
3. Baghouse #4 and #7 U-tubes receiving stations enclosed to minimize wind dispersal of fine particulate matter.
4. Manifold system installed for vacuuming reverberatory flue trail.
5. Baghouse loading systems into closed hopper cars improved to minimize wind dispersal of fine particulate matter.
6. New slag crushing equipment (high frequency shakeout) installed in 1997, which reduces generation of dust. The company is currently evaluating the need for an additional air emission control device for this operation.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

IV. Activity - Specific Source Control BMP's

A. Fueling Activities

1. Potential sources of contamination

- a. Leaking storage tanks.**
- b. Spills and leaks that could happen during delivery.**
- c. Spills caused by "topping off" fuel tanks.**
- d. Rainfall on or runoff into the fueling area.**

2. BMPs

- a. Fuel area graded to prevent runoff.**
- b. New above ground double containment storage tanks.**
- c. Entire area paved.**
- d. Secondary containment constructed with concrete dike around perimeter of tanks.**
- e. Automatic shut-off of pumps.**
- f. Sorbents available to control spills.**
- g. Weekly inspection of area.**

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Storm Water Pollution Prevention Plan
SWPPP

B. Vehicle and Equipment Maintenance

1. Potential sources of contamination

- a. Parts cleaning.
- b. Shop cleanup.
- c. Spilled fuel or oil.
- d. Replacement of fluids.

2. BMPs

- a. Check for leaking oil and fluids.
- b. Collect leaking or dripping fluids in drip pan.
- c. Park forklifts inside buildings whenever possible.
- d. Sorbents available to control spills.
- e. Used oils, degreasers, and cleaning solvents recycled off-site.

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Storm Water Pollution Prevention Plan
SWPPP

C. Loading and Unloading Materials

1. Potential Sources of Contamination

- a. Transfer of boxes, drums, or other containers by forklift.
- b. Transfer by mechanical conveyor systems.
- c. Spillage.

2. BMPs

- a. Covered shipping and receiving warehouses with building overhangs at loading docks.
- b. Paved and graded area around warehouses to direct runoff away.
- c. Limit exposure of material to precipitation.
- d. Regularly sweep and vacuum clean areas around loading and unloading docks.

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Storm Water Pollution Prevention Plan
SWPPP

D. Outside Storage of Material

1. Potential Source of Contamination

- a. Storm water runoff or rainfall coming in contact with materials stored outside.
- b. Wind dispersal of dusty material.

2. BMPs

- a. Paved over area where soil excavated during closure was stored.
- b. Constructed covered storage bins for outside storage of furnace slag.
- c. Attempt to maintain better inventory control to minimize outside storage of scrap material.
- d. Minimize or eliminate outside storage of dusty material.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

E. Air Pollution Control

1. Potential Source of Contamination

- a. Settling of suspended particulate matter on ground and building roofs from air emissions generated at site.

2. BMPs

- a. Construction and installation of new pulse jet baghouse #12 to capture and clean fugitive emissions from cupola furnace system.
- b. Improvement of efficiency and capacity of Baghouses #8 and #9.
- c. Piping modification of Baghouse #11 and new hooding in foundry to increase efficiency.
- d. Installation of curtains in key locations in furnace areas to increase capture efficiency of fugitive emissions.
- e. Regularly vacuum and clean building roofs.
- f. Regularly inspect and vacuum zinc oxide unloading areas.
- g. Baghouse maintenance staff
- h. Daily and weekly maintenance preventative checks
- i. Air pollution control devices and associated emission units.

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Storm Water Pollution Prevention Plan
SWPPP

F. Process Water Recirculating System

1. Potential causes of unintentional release

- a. External corrosion and structural failure of tanks.
- b. Spills and overfills due to operator error.
- c. Failure of piping systems.
- d. Failure of water level sensing devices that are controlling pumping.
- e. Failure of mechanical devices such as pumps, valves, ... etc.
- f. Plant power failure.

2. BMPs

- a. Initial training to maintenance staff conducted by project engineers.
- b. Daily and weekly checks of system by maintenance staff.
- c. Valves labeled to minimize human error.
- d. Annual pump inspection by manufacturer.
- e. Weekly pump rotation.
- f. Redundancy of key mechanical devices installed throughout the system.
- g. Annual tank maintenance.
 - 1. Paint inspection and maintenance.
 - 2. Sacrificial anodes installed.
- h. O&M manual developed by project engineers and distributed to key personnel in the plant.
- i. Sophisticated alarm warning system installed in security office which conducts 24 hour surveillance.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

V. Pollutants of Concern

The following pollutants have a reasonable potential to be present in storm water discharges at this facility:

| | |
|------------------|----------------|
| suspended solids | nickel |
| iron | zinc |
| cadmium | oil and grease |
| copper | boron |
| lead | pH |

VI. Employee Training

Training will be provided to all employees whose duties and responsibilities include any activity associated with storm water pollution prevention and best management practices. The initial training will be incorporated into existing environmental training programs and will be provided within 90 days of the effective date of this plan. Thereafter, periodic review and update of this training will be conducted annually. Topics to be covered during training will include the following:

- Spill prevention and response
- Good housekeeping
- Material management procedures
- Potential pollutant sources
- Other aspects of this plan

VII. Size of Facility

| <u>Outfall Number</u> | <u>Estimated Area of Impervious Surface</u> | <u>Total Area Drained (Acres)</u> |
|-----------------------|---|---------------------------------------|
| 002 | 8.99 | 8.99 |
| 003 | 1.27 | 1.78 |
| 004 | 5.86 | <u>6.69</u> |
| | | 17.46 acres |

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

VIII. Plan Evaluation

A. Comprehensive Site Compliance Evaluation

Qualified personnel from the Pollution Prevention Team will conduct a comprehensive site compliance evaluation at least once a year. This evaluation will consist of:

1. Inspection of storm water drainage areas for evidence of pollutants entering the drainage system.
2. Evaluation of the effectiveness of existing measures to reduce pollutant loadings and of whether additional measures are needed.
3. Inspection of any equipment needed to implement the plan.
4. Observation of structural BMPs to insure proper operation.
5. Revision of the plan as needed within two weeks of inspection.
6. Timely implementation of necessary changes.
7. Preparation of a report summarizing inspection results and follow up actions, the date(s) of inspection and the personnel conducting the inspection. This report will identify any incidents of noncompliance or will certify that the facility is in compliance with the plan.
8. Periodic review and comparison of storm water sampling results from plant outfalls.

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

B. Recordkeeping and Internal Reporting

Information describing the quality and quantity of storm water discharges at the facility has been documented and maintained for years. Inspections and maintenance activities pertaining to this Plan will be documented and kept (see Appendix C) and a recordkeeping system will be set up for documenting spills, leaks, and any other discharges that could affect storm water quality. These records will be maintained for at least one year after the expiration of the facility's NPDES permit.

C. Plan Revisions

Whenever there are any changes in design, construction, operation or maintenance of the facility that will have a significant effect on the potential for discharging pollutants in storm water, the Plan will be modified to reflect those changes. Also, the Plan will be revised, if necessary after each Comprehensive Site Compliance Evaluation.

IX. Sampling Data

A summary of existing storm water sampling data is provided in Appendix B.

X. Person Responsible for Preparation of the Plan

Dennis Caldwell
Environmental Coordinator
January 10, 1997

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

APPENDIX A

SITE MAP
&
TOPOGRAPHIC MAP

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APPENDIX B
SAMPLING DATA

2

1

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APPENDIX D
STORM AND PROCESS WATER
SYSTEM SCHEMATIC

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APPENDIX E
AIR POLLUTION CONTROL DEVICES
AND
ASSOCIATED EMISSION UNITS

NORMAL OPERATION OF POLLUTION CONTROL DEVICES**R. LAVIN & SONS**

| <u>Emission Units</u> | <u>Pollution Control Devices</u> |
|---|---|
| <u>#1, #2, #4 Reverb Furnaces</u> | |
| Non-Fugitive emissions | #1, #2 and #3 Baghouses |
| Fugitive emissions | #4, #7 and #11 Baghouses (Side hood #4 reverb goes to #10 baghouse) |
| <u>#1, #2, #3, #4 and #5 Rotary Furnaces</u> | |
| Non-Fugitive emissions | #1, #2 and #3 Baghouses |
| Fugitive emissions (#1, #2, #3 rotaries) | #10 Baghouse (can also go to #4 Baghouse, if necessary) |
| (#4 and #5 rotaries) | #5 Baghouse (can also go to #10 Baghouse, if necessary) |
| <u>#6 and #7 Rotary Furnaces</u> | |
| Non-Fugitive emissions | #8 and #9 Baghouses |
| Fugitive emissions | #8 and #9 Baghouses |
| <u>Cupola Furnace</u> | |
| Non-Fugitive emissions | #1, #2 and #3 Baghouses |
| Fugitive emissions | #10, #11 and #12 Baghouses (can also go to #4 or #5 baghouse, if necessary) |
| <u>Lindberg Furnace</u> | |
| Non-Fugitive emissions | #10 Baghouse |
| Fugitive emissions | #10 Baghouse |

NORMAL OPERATION OF POLLUTION CONTROL DEVICES

R. LAVIN & SONS

Flux Furnace

Non-Fugitive emissions
Fugitive emissions

#10 Baghouse
#10 Baghouse

Electro Kettle, Tin Kettle

Non-Fugitive emissions
Fugitive emissions

#6 Baghouse
#6 Baghouse

Hydraulic Presses

Non-Fugitive and Fugitive emissions

#1, and #2 Press - #1 Cyclone
#3 Press - #2 Cyclone

Brass Dryer

Non-Fugitive and Fugitive emissions

Afterburner

R. Lavin & Sons, Inc.
Storm Water Pollution Prevention Plan
SWPPP

APPENDIX F
FORMS AND FILE NAMES

Special Conditions

As practicable, a manual grab sample shall be taken, in a glass bottle, during the first hour or less of the discharge at Outfall 001 and analyzed separately for pH and for oil & grease. When impracticable, permittee shall provide an explanation in the monthly Discharge Monitoring Report.

SPECIAL CONDITION 10. Permittee may use its existing single-bottle flow-proportioned sampler to take a "daily composite" sample at Outfall 002. The sampling location shall be the overflow weir. A daily composite sample shall be a single sample formed when the sample combines individual samples taken at successive flow intervals of 5,000 gallons. The daily composite must be based on at least three individual samples taken at different times, and will be analyzed for all parameters listed above except pH, and oil & grease.

As practicable, Permittee shall take a manual grab sample, in a glass bottle, at Outfall 002 during the first hour or less of the discharge. This sample shall be analyzed for pH and for Oil & Grease. Where impracticable, permittee shall provide an explanation in its monthly discharge monitoring report for the lack of a sample.

Permittee may use its existing time-proportioned sampler, with plastic bottles, to take grab samples at Outfall 003 or Outfall 004. After a reportable discharge has been sampled for the month the sampler shall be relocated to the vacant manhole so that the next reportable discharge for the month, if any, may be sampled at the other outfall. If equipment maintenance or malfunction, or inclement weather prohibit the collection of a composite sample, as defined below, then sampling shall consist of a grab sample. The sampling location shall be in the manhole for each outfall. The first grab sample shall be taken during the first hour or less of the discharge and will consist of the first aliquot taken by the sampler. Additional grab samples will be taken by the sampler in each succeeding hour of the discharge with a minimum of four grab samples for storm discharges of four hours or longer. The daily composite shall be a single sample formed by combining the individual samples taken during successive hourly intervals after the first grab sample. The daily composite must be based on at least three individual samples taken at different times. One analysis shall be run on the initial grab sample; the remaining grab samples shall be composited and one analysis shall be run on the composite sample. The analyses shall include all parameters listed above except oil & grease. If the discharge from Outfall 002, 003, or 004 is insufficient to generate three individual samples for compositing purposes, no daily composite value need be reported.

As practicable, during a reportable discharge when the automatic sampler is in either the manhole for Outfall 003 or 004, a grab sample shall be taken in a glass bottle from the vacant manhole and analyzed for pH and Oil & Grease. Where impracticable, permittee shall provide an explanation in its monthly discharge monitoring report for the lack of a manual grab sample at Outfall 003 or 004.

SPECIAL CONDITION 11.STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- A. A storm water pollution prevention plan shall be developed by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
- B. The plan shall be completed within 90 days of the effective date of this permit. Upon completion the plan shall be submitted to the Division of Water Pollution Control, Compliance Assurance Section, for review and approval. The review period will extend 60 days from date that the plan is received by the IEPA. During the 60 day review period the IEPA may make comments which may need to be addressed by the permittee before the plan can be approved. Upon written plan approval compliance with the terms of the plan shall be made within 120 days.
- C. The permittee may be notified by the IEPA at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes or to file an appeal of the permit with the Illinois Pollution Control Board pursuant to Section 39.(b) of the Illinois Environmental Protection Act 415 ILCS 5/39(b)(1994).
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph G of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the IEPA for review upon written request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

Special Conditions

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
 2. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations;
 - vii. Areas of existing and potential soil erosion; and
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, and access areas.
 3. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities; and
 - v. Methods of onsite storage and disposal of significant materials;
 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
 6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

Special Conditions

1. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights thereunder.
2. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.
3. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.
4. Construction activities which result from treatment equipment installation, including cleaning, grading and excavation activities which result in the disturbance of five acres or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

- L. The facility shall submit an annual inspection report to the IEPA. The report shall include results of the annual facility inspection which is required by Part G of the SWPPP of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
- M. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- N. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
- O. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

SPECIAL CONDITION 12. The facility's stormwater retention ditches shall not be used to store process wastewater. The stormwater retention ditches shall be pumped as low as possible during dry weather periods to maintain their usable capacity. When dredging is performed on the facility's storm water retention ditches the permittee shall be required to record any dates on which dredging occurred. The permittee shall submit a quarterly report to the Compliance Assurance Section, at the address indicated in Special Condition 5, listing the dates on which dredging occurred during the previous calendar quarter. The quarterly reports shall be submitted on or before the 15th of April, July, October and January each year.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF LEGAL COUNSEL
2200 CHURCHILL ROAD, P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276
TELEPHONE (217)782-5544 • FACSIMILE (217)782-9807

P. 01

DATE: May 23, 1997

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